

Antipyretics I, II, III.—BARBOUR and DEVENIS (*Arch. Int. Med.*, Chicago, 1919, xxiv, 611). The Benedict respiration chamber was used to study the respiratory exchange of five normal subjects. The dose of acetylsalicylic acid was 1 gm. or 1 gm. 25, and the experiments were carefully controlled. It was found that the CO₂ production and the O₂ consumption were, in the majority of instances, increased, showing therefore an increased total metabolism. The average heat production increase was 6.1 per cent. over normal controls. The respiratory quotient and the pulse-rate were not altered. After the preliminary study of normal subjects the same dose of the drug was exhibited and the same procedure used in the study of five febrile patients. It was determined that acetylsalicylic acid exhibits marked antipyretic action in febrile subjects contrary to its effect on the normal controls. Heat elimination was increased 38.2 per cent. These experiments show that "acetylsalicylic acid, like other antipyretic drugs, exerts its temperature-reducing action essentially by increasing the processes of heat elimination." "This action of acetylsalicylic acid is exhibited in afebrile stages and during convalescence, with resulting subnormal temperatures." Antipyretics therefore "reduce the body temperature in fever cases (including temporarily afebrile and convalescent phases) but not in normal persons."

SURGERY

UNDER THE CHARGE OF

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Treatment of Metastatic Carcinoma of the Spine by Deep Roentgenotherapy.—PFAHLER (*Surg., Gyn. and Obst.*, 1919, xxix, 236) says that the roentgen rays when applied properly and in sufficient quantity upon deep seated cancer tissue may be expected to destroy the cancer cell, and this cancer cell is replaced by healthy scar-tissue, or fibrous tissue. When the disease is located in the soft tissues, it is replaced by fibrous tissue, and when located in bone it heals by bone sclerosis. As a result of this healing process, the patient is given prolongation of life, and is made more comfortable. One cannot expect the patient to make a complete, permanent recovery, for ultimately the disease is apt to show metastases particularly in the areas not treated.

Megaduodenum.—DUBOSE (*Surg., Gynec. and Obst.*, 1919, xxix, 278) says that a search of the literature finds no recorded case of giant duodenum in an infant. The symptoms in his case began when the child was three days old, and the patient was first seen by Dubose when eight weeks old. Gastro-enterostomy with pyloric occlusion is the operation of choice in partial obstruction at the duodenojejunal flexure in infants

for the following reasons: The dilated stomach is drained into the jejunum. Pyloric obstruction diverts bile and pancreatic fluid into the jejunum and prevents regurgitation into the stomach. Bile, pancreatic, and duodenal fluid with the contained hormones, so greatly needed, are more largely conserved than if the pylorus were not occluded. Regurgitation into the stomach and loss of fluids is lessened through cessation of vomiting—more certainly obtained in gastro-enterostomy with pyloric occlusion than in duodenojejunostomy. Pyloric occlusion is essential. Five months have elapsed since this operation was done, and the infant weighed then 12 pounds and 8 ounces.

Futility of Bridging Nerve Defects by Means of Nerve Flaps.—STOOKEY (*Surg., Gynec. and Obst.*, 1919, xxix, 287) presents a very thorough study of clinical, experimental and anatomical data from the literature and says that the repair of nerve defects by means of nerve flaps has not been definitely supported clinically, as evidenced by a critical study of the reported cases. Experimentally it has been shown that nerve flaps do not serve as conducting paths for the downgrowing neuraxes. Nerve flaps whether central or peripheral are merely degenerated partial nerve segments. Continuity and union of neuraxes does not take place at point of suture. To avoid fallacious deductions it is important to distinguish between the level of the injury to the nerve trunk and the level at which muscular branches arise. Abnormal communicating branches are not rare, particularly between the median and ulnar. Such anomalies must be taken into consideration of any careful study of nerve injuries. Judging from the level of the lesion, muscles may not be presumed paralyzed but should be demonstrated paralyzed. Total movements may not be offered as evidence of return of function. The action of individual muscles must be given. Reports of peripheral nerve injuries, to be of value, must be accompanied by motor, sensory and electrical findings. By the formation of nerve flaps from the central stump a portion of the nerve from which neuraxes must grow is removed. Distal as well as central flaps may sever muscular branches. By reversing the flaps they are taken out of their field. Thus the downgrowing neuraxes are prevented from reaching their muscles through these muscular branches, even were regeneration to take place. The nerve flap method to bridge nerve defects should be discarded in peripheral nerve surgery.

Early Surgical and Orthopedic Treatment of Hemiplegia.—BYRNE, TAYLOR and BOORSTEIN (*Surg., Gynec. and Obst.*, 1919, xxix, 398) says that early operation within two to four weeks, or even after a much longer period, may be indicated in hemiplegia: (a) Where the intracranial pressure threatens medullary strangulation, no matter what the site or nature of the lesion; (b) in extradural hemorrhage, with or without intradural hemorrhage, or cerebral contusion, where cerebral compression threatens life or permanent disability; (c) in intradural hemorrhage of traumatic or spontaneous origin where cerebral compression threatens life or permanent disability; (d) in intracerebral hemorrhage where focal compression threatens life or permanent disability. A subtemporal decompression and evacuation of the clot is a simple procedure and should be used in every case of fresh hemiplegia where the above-mentioned indications are present. If the patient be